

Identification of a Legionellosis Outbreak

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Legionellosis Webinar #1

September 15, 2010

Why Legionellosis Webinars?

- ❑ Water, Sanitation, and Hygiene (WASH) Webinars began in January 2010.**
- ❑ Participants were asked which topics they'd like to hear more about during WASH Webinars.**
- ❑ Many respondents wanted to learn more about legionellosis outbreak investigations.**
- ❑ So, by popular demand, we've scheduled a series of 3 webinars organized chronologically as one would investigate an actual outbreak.**

Legionellosis Webinars

❑ Webinar #1, September 15, 3-4 pm ET

- Identification of an Outbreak
- Environmental Assessment (excluding sampling for *Legionella*)
- Discussion / Q & A

❑ Webinar #2, October 27, 3-4 pm ET (tentative)

- When to Continue an Outbreak Investigation
- Environmental Sampling
- Discussion / Q & A

❑ Webinar #3, November 17, 3-4 pm ET

- Public Health Response
- The Importance of Molecular Typing
- Discussion / Q & A

Outline

- ❑ Travel-associated clusters**
- ❑ Healthcare-associated clusters**
- ❑ Community clusters**

Identifying a Cluster

- ❑ Notification from CDC or another state (travel-associated)**
- ❑ Notification from a healthcare facility (healthcare-associated)**
- ❑ Identified via your surveillance (any of the above or community-associated)**

Travel-associated Notifications

- ❑ **CSTE Position Statement 2005 → increased awareness, greater identification of travel-associated cases**
- ❑ **Notification network travellegionella@cdc.gov addresses issue of out of state travelers**
- ❑ **Searchable accommodations database at CDC (overnight stays only)**
 - A detailed travel history is essential!
 - Collect dates of stay, hotel name & address, room #, and water exposures (e.g., showers, WPS)
- ❑ **Two cases with stays at same accommodation within one year → possible cluster**
- ❑ **More than 2 cases → full outbreak investigation**

Recommendations for Investigating a Possible Travel-associated Cluster

- ❑ **Initial case finding → Epi-X Call for Cases**
- ❑ **Notify accommodation owner and management**
 - Ask if they are aware of any other cases or similar illnesses
 - Educate regarding legionellosis and discuss ways to reduce risk
 - Recommend hiring a private consultant
 - Share ASHRAE guideline
- ❑ **Conduct an Environmental Assessment**

Healthcare-associated Clusters

- ❑ **Notification from ICP in healthcare setting**
 - Long term care facility / nursing home / assisted living facility
 - Hospital
- ❑ **Or, noticed through routine surveillance**
- ❑ **Public Health's response differs depending on:**
 - Extent of outbreak
 - Capability of the facility
- ❑ **One case of healthcare-associated legionellosis → full epidemiologic and environmental investigation IF the case spent their entire incubation period in the facility**

Resources for Investigating Healthcare-associated Clusters (www.cdc.gov/legionella)

- ❑ **CDC. Guidelines for preventing healthcare-associated pneumonia, 2003. MMWR 2004;53(RR03):1-36.**
- ❑ **Barbaree JM et al. Protocol for sampling environmental sites for *Legionellae*. Applied and Environmental Microbiology 1987;53:1454-1458.**
- ❑ **CDC. Guidelines for environmental infection control in healthcare facilities. MMWR 2003;52(RR10):1-42.**

Identifying Community Clusters

- ❑ **Mapping surveillance cases is important and useful in identifying community clusters**
- ❑ **Are there more cases in a certain area than you would expect?**

Guidance for Investigating Community Clusters

- ❑ Use a hypothesis-generating questionnaire to re-interview all cases**
- ❑ Get details of daily movements**
- ❑ Map using mapping software (e.g., ArcView GIS) or Google Maps**
- ❑ Inspect area for cooling towers**
- ❑ Alert area hospitals for additional case finding**

Initial Considerations for Legionellosis Clusters

- ❑ Collect clinical specimens to confirm possible cases**
- ❑ Collect respiratory specimens for culture**
 - Important for linking cases to an environmental source if environmental sampling is done
 - Locate specimens and have shipped to the state lab – may or may not have to test
- ❑ Inform facility/accommodation owner or management**
- ❑ Conduct environmental assessment**
- ❑ Additional case finding**



Teamwork!

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**Report travel-associated cases to
travellegionella@cdc.gov**

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333

Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.